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REMARKS

Claims 1-20 are pending.

The Examiner has: i) allowed Claims 4-5 and 10-12;

- ii) objected to Claim 9 and the figures; and
- iii) rejected Claims 1-3, 6-8, and 13-20.

With this Response, Applicant re-presented, and currently amended, Claim 9. More specifically, the Examiner objected to Claim 9 "as being dependent upon a rejected base claim, but [indicated it] would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims," which Applicant has now done. Thus, Applicant re-presents Claim 9 and did not otherwise amend same.

In addition, the Examiner also objected to the figures under 37 CFR 1.83(a), indicating "the limitation in claim 9 'logically inverted prior to the logically ORing' must be shown or the feature(s) canceled from the claim(s)." Accordingly, Applicant included a Replacement Drawing Sheet in Attachment A for FIGS. 1-2, with FIG. 2 now showing the requested logical inverter. Applicant did not add any new matter with this amendment to FIG. 2, for which supports abounds throughout the original specification, figures, and claims, as understood by those skilled in the art. For example, as a convenience to the Examiner, the Examiner can find exemplary support for this amendment to FIG. 2 at page 11, lines 19-21, as well as in the original Claim 9 itself. Accordingly, Applicant did not add any new matter with this amendment to FIG. 2.

Now then, the Examiner has continued to maintain the following rejections:

- > Claims 1-2, 6-8, 13-15, and 17-19 under 35 U.S.C. § 102(b) as being anticipated by U.S. Pat. No. 5,539,685 to Otaguro ("Otaguro"); and
- Claims 3, 16, and 20 under 35 U.S.C. § 103(a) as being obvious over Otaguro in view of U.S. Pat. No. 6,321,248 to Bonnet et al. ("Bonnet").

Respectfully, Applicant continues to traverse and request withdrawal. More specifically, the Examiner and Applicant continue to disagree regarding whether Otaguro anticipates or renders obvious any of the following: i) fixed-point formats;

- ii) partial ALU calculations; and
- iii) parallel processing.

For example, in the May 6, 2005 Final Office Action, the Examiner asserted that Otaguro "directly and indirectly disclose[s] the first and second operands as fixed-point formats" and 1037563v1

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Otaguro "does not limit the first and second operands to any particular operand format and the circuit structure does not require any particular operand format either." As a preliminary matter, Applicant fails to understand how a single reference can both "directly" and "indirectly" disclose a single claimed element. Nevertheless, as Applicant previously asserted, Otaguro only identifies the first operand in QR register 101 as a "multiplier" (see, e.g., Col. 9, line 14) and the second operand in LLT register 103 as a "multiplicand" (see, e.g., Col. 9, line 26). Thus, Applicant continues to respectfully assert that Otaguro does not specify a fixed-point format for either of these operands, and therefore, it does not "directly" disclose the first and second operands as fixed-point formats, nor does it do so "indirectly," which Applicant respectfully asserts is an insufficient legal standard to sustain a 35 U.S.C. § 102 rejection.

In addition, in the May 6, 2005 Final Office Action, the Examiner asserted that Otaguro's FIG. 10 "clearly discloses the partial ALU calculations as the adder 106," which "in repetitive would act as an accumulator wherein it would add or sum all the inputs operands from 104 and 105." However, Applicant asserts that repetitive calculations do not anticipate partial calculations, and the Examiner is without support to assert otherwise. Nevertheless, as a convenience to the Examiner, Applicant amended Claims 1-3, 6-7, 13, and 15-17 to specify that the arithmetic operation is discontinued if an overflow is detected, which Otaguro fails to anticipate or render obvious. As a further convenience to the Examiner, Applicant also amended several of the independent claims to specify that the result of the arithmetic operation is input into a multiplexor, which Otaguro also fails to anticipate or render obvious. More specifically, Otaguro does not disclose a multiplexor in any fashion, thereby defeating a 35 U.S.C. § 102 rejection, and Bonnet does not cure this deficiency, to which Applicant respectfully reserves the right to respond more fully in accordance with the Examiner's understanding of the above. Accordingly, Applicant respectfully asserts that each of the above rejections is rendered moot under 35 U.S.C. §§ 102 and 103 in view of their individual and collective failures to anticipate or render obvious Applicant's inventive arrangements, as claimed.

As a result of at least the foregoing, Applicant respectfully asks the Examiner to withdraw the rejection of Claims 1-2, 6-8, 13-15, and 17-19 under 35 U.S.C. § 102 as being anticipated by Otaguro and Claims 3, 16, and 20 under 35 U.S.C. § 103 as being obvious over Otaguro in view of Bonnet.

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Lastly, Applicant acknowledges that the Examiner considered the following references pertinent to Applicant's disclosure without relying thereupon:

- > U.S. Pat. No. to 6,535,900 to Perets et al.; and
- > U.S. Pat. Nos. to 5,745,393 and 5,844,827 to Wong.

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CONCLUSION

Applicant believes Applicant has overcome the Examiner's i) objection to Claim 9 and the figures, including the logical inverter now shown in FIG. 2, ii) rejection of 1-2, 6-8, 13-15, and 17-19 under 35 U.S.C. § 102(b) as being anticipated by Otaguro, and iii) rejection of Claims 3, 16, and 20 under 35 U.S.C. § 103(a) as being obvious over Otaguro in view of Bonnet. In addition, Applicant believes Claims 1-20 are patentable. Thus, Applicant respectfully submits that all pending claims are in a condition for allowance, which Applicant respectfully requests. Accordingly, Applicant also seeks notification to that effect. Finally, Applicant also believes this Response should allow the Examiner to allow the above-referenced patent application to issue as a U.S. patent without further amendments to the specification or claims.

If questions arise, please telephone Applicant's undersigned attorney.

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EXTENSION OF TIME

The proceedings herein are for a patent application and the provisions of 37 CFR 1.136 apply. Applicant does not believe this Response requires an extension of time. However, Applicant hereby requests a conditional petition in case Applicant inadvertently overlooked the need to petition for an extension of time, or any other required fee, in which case Applicant requests that any and all applicable charges be charged to Applicant's Deposit Account No. 23-2053. Applicant intends this authorization to be carried throughout the pendency of this Application, in full accordance with 37 CFR 1.136.

Respectfully submitted,

Dated: 8/8/05

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